

[Abstract]

The present invention is related to an ablative baffle for a liquid rocket engine thrust chamber that comprises: a hub member having a hollow structure, of which both top and bottom parts are open; a plurality of blade rib members, each of which is connected removably at one end to the outer surface of the hub member; and a blade-connecting member having a hollow structure, of which both top and bottom parts are open, to the inner part of which each of blade rib members is connected at the other end. The present invention does not use a conventional internal cooling method, but an ablation cooling method using the composite heat resistant material structure with metal core, so that a liquid rocket engine system may be simplified, and the reliability of liquid rocket engine increases, and the manufacturing cost is cut down.